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54 Method for enacting failover of a 1:1 redundant pair of slave processors.

57 A primary slave IOP, upon detecting an error, verifies the availability of a secondary slave IOP, then requests backup and takes itself out of being the primary. A secondary slave IOP assumes the role of the primary slave IOP. A master controller, detecting an error with the primary slave IOP, interrogates the primary and secondary slave IOPs for a status input, and then arbitrates between the first and second IOP to determine the IOP that is to take on the primary role. Finally the master controller awards the more operational IOP the role of the primary slave IOP, thereby completing the failover operation.

A primary slave IOP which fails sets the output control signal as part of its failure handling and watchdog timeout function. The output control signal is also set to indicate backup for an unpowered IOP.

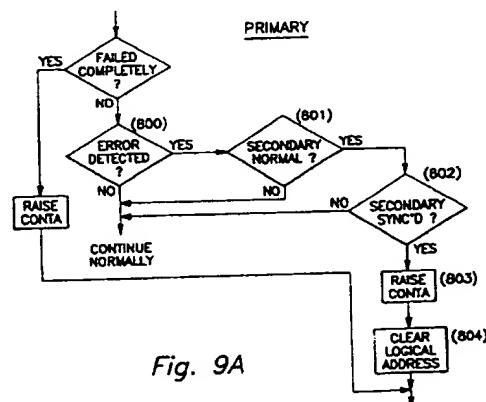


Fig. 9A

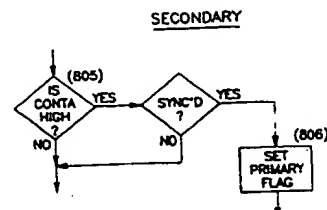
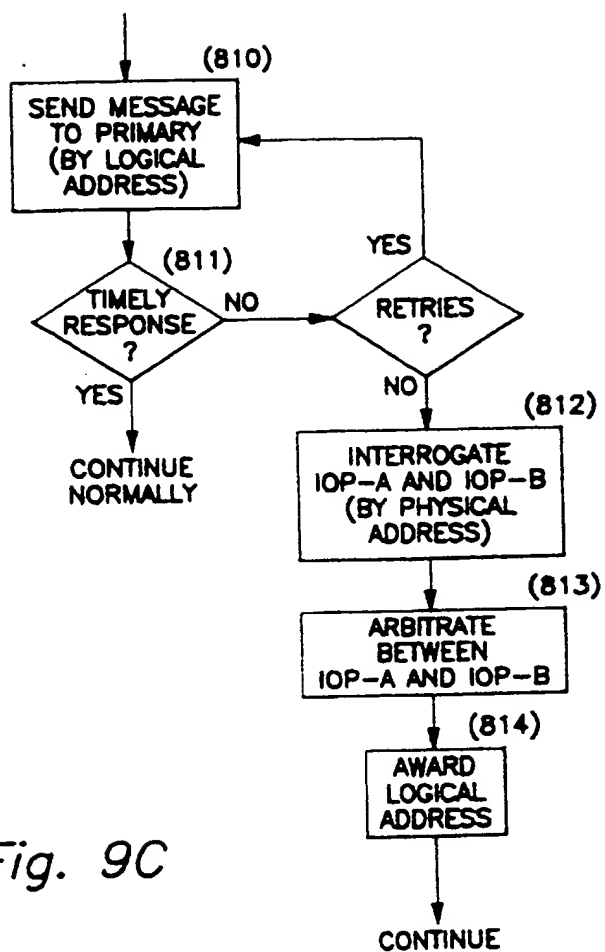


Fig. 9B

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CONTROLLER*Fig. 9C*

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# EUROPEAN SEARCH REPORT

Application Number

EP 91 30 8715

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
D, Y	US-A-4 958 270 (MCLAUGHLIN ET AL.)  * abstract; figure 1 * * column 1, line 60 - column 2, line 30 * * claims 1-8 * ---	1-3, 5-7, 10-12, 14-15	G06F11/20
Y	US-A-4 872 106 (SLATER)  * abstract; figure 2 * * column 1, line 62 - column 2, line 29 * * column 4, line 57 - column 5, line 59 * * claims 1-5 * ---	1-3, 5-7, 10-12, 14-15	
Y	US-A-4 395 755 (WAKAI) * abstract * * column 2, line 39 - column 3, line 8 * -----	6, 15	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			G06F
Place of search THE HAGUE		Date of completion of the search 19 APRIL 1993	Examiner SARASUA GARCIA
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone  Y : particularly relevant if combined with another document of the same category  A : technological background  O : non-written disclosure  P : intermediate document</p> <p>T : theory or principle underlying the invention  E : earlier patent document, but published on, or after the filing date  D : document cited in the application  L : document cited for other reasons  A : member of the same patent family, corresponding document</p>			

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